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10/790,189	03/02/2004	Minoru Kakinuma	981414A	3120

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EXAMINER

VILLECCO, JOHN M

ART UNIT	PAPER NUMBER
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2622

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/790,189	Applicant(s) KAKINUMA ET AL.	
	Examiner JOHN M. VILLECCO	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-27, 30-52 and 62-84 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 and 8-26 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 is/are allowed.
- 6) ☒ Claim(s) 6, 27, 30-52 and 62-84 is/are rejected.
- 7) ☒ Claim(s) 30-52, 64, 68 and 72 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/204,276.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/2/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group II in the reply filed on March 3, 2008 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 1-4 and 8-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 3, 2008.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

4. The disclosure is objected to because of the following informalities:

- On page 46, line 23, applicant recites the phrase "Ffig. 26". It appears that this is a typographical error and that the applicant meant to use the phrase – Fig. 26.

Appropriate correction is required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 27, 30-52, and 62-84 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-25 and 35-57 of U.S. Patent No. 6,744,471. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present application includes claims that are broader in scope than

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claims 1, 3-25, and 35-57 of U.S. Patent No. 6,744,471. Therefore, any patent granted on claims 27, 30-52, and 62-84 would result in the unjustifiable timewise extension of the monopoly granted on U.S. Patent No. 6,744, 471. Additionally, it is important that these two inventions are always commonly owned.

7. In particular, claim 27 of the present application is identical to claim 1 of U.S. Patent No. 6,744,471 up until the last limitation of claim 1, which is an added limitation. Thus, claim 27 is broader in scope.

8. Claims 30-52 and 62-84 are verbatim the same as claims 3-25 and 35-57 of U.S. Patent No. 6,744,471.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claims 6, 27, and 74-76 rejected under 35 U.S.C. 102(e) as being anticipated by**

Fukuda et al. (U.S. Patent No. 6,278,490)

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived

from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

11. Regarding *claim 6*, Fukuda discloses an electronic camera for performing synthesis of two images each of which have a different exposure time to form an image with a wide dynamic range. The camera includes a electronic flash tube (20) for emitting a flash at both a timing in the second half of a charge accumulating time at a first shot and a timing in the first half of charge accumulating time of the image pickup device at a second shot. See column 18, lines 57-67. Additionally, Fukuda teaches the use of a light-receiving device (25) for receiving the light from an object. The light-receiving device acts as the photometric device. The camera of Fukuda also includes a light emission control circuit (18) and a light emission driving circuit (19) for controlling the emitting of light from the electronic flash tube. The second emission is terminated based on an emission amount reaching a predetermined limit. Therefore the ratio of one light emission amount and the other light emission amount combine to stop the emission of the electronic flash tube. See column 13, lines 36-56.

12. As for *claim 27*, Fukuda discloses an optical means (1) for forming an optical image, an image pickup means (3), flash emission means (20), exposure conditions designating means, image pickup synthesizing means (8), a flash emission control means (18), and control means (16) for controlling each of the other members. The system controller act to exposure condition designating means since it sets the exposure times of both of the image pickups.

13. Regarding *claim 74*, Fukuda discloses that the light emission control circuit (18) controls a light emission driving circuit (19) such that while the exposure amount does not reach a predetermined light amount due to variations in light emission, light emission is continued. This

process is done for two exposure periods. It is interpreted by the examiner that since the light emission is not stopped until it reaches a predetermined emission amount, the light emission is a single emission. See column 13, lines 37-50.

14. As for *claim 75*, as described above, the light emission is effected as a single unit emission and a collection of a plurality of times of unit emission. See column 13, lines 37-57.

15. With regard to *claim 76*, Fukuda discloses that a smaller light emission is effected and then a larger emission. See column 18, lines 60-67 and Figure 18.

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

17. **Claims 27 and 74-76 are rejected under 35 U.S.C. 102(a) as being anticipated by Fukuda et al. (Japanese Publ. No. 09-312199 A).** For examination purposes, U.S. Patent No. 6,278,490, Figures 1-14, will be used in this discussion, since it is assumed that they contain the same material.

18. Regarding *claim 27*, Fukuda discloses an optical means (1) for forming an optical image, an image pickup means (3), flash emission means (20), exposure conditions designating means, image pickup synthesizing means (8), a flash emission control means (18), and control means (16) for controlling each of the other members. The system controller act to exposure condition designating means since it sets the exposure times of both of the image pickups.

19. Regarding *claim 74*, Fukuda discloses that the light emission control circuit (18) controls a light emission driving circuit (19) such that while the exposure amount does not reach a predetermined light amount due to variations in light emission, light emission is continued. This process is done for two exposure periods. It is interpreted by the examiner that since the light emission is not stopped until it reaches a predetermined emission amount, the light emission is a single emission. See column 13, lines 37-50.

20. As for *claim 75*, as described above, the light emission is effected as a single unit emission and a collection of a plurality of times of unit emission. See column 13, lines 37-57.

21. With regard to *claim 76*, Fukuda discloses that a smaller light emission is effected and then a larger emission. See column 9, lines 7-15 and Figure 4.

22. **Claims 27 and 74-76 are rejected under 35 U.S.C. 102(a) as being anticipated by Fukuda et al. (Japanese Publ. No. 09-326963 A).** For examination purposes, U.S. Patent No. 6,278,490, Figures 15-20, will be used in this discussion, since it is assumed that they contain the same material.

23. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

24. Regarding *claim 27*, Fukuda discloses an optical means (101) for forming an optical image, an image pickup means (103), flash emission means (120), exposure conditions designating means, image pickup synthesizing means (107), a flash emission control means (118), and control means (116) for controlling each of the other members. The system controller

act to exposure condition designating means since it sets the exposure times of both of the image pickups.

25. Regarding *claim 74*, Fukuda discloses that the light emission control circuit (118) controls a light emission driving circuit (119) such that while the exposure amount does not reach a predetermined light amount due to variations in light emission, light emission is continued. This process is done for two exposure periods. It is interpreted by the examiner that since the light emission is not stopped until it reaches a predetermined emission amount, the light emission is a single emission. See Figure 16.

26. As for *claim 75*, as described above, the light emission is effected as a single unit emission and a collection of a plurality of times of unit emission. See Figure 16.

27. With regard to *claim 76*, Fukuda discloses that a smaller light emission is effected and then a larger emission. See Figure 16.

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. **Claims 62 and 66 are rejected under 35 U.S.C. 103(a) as being obvious over Fukuda et al. (U.S. Patent No. 6,278,490) in view of Matsui et al. (U.S. Patent No. 5,640,622).**

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only

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under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

30. Regarding *claim 62*, as mentioned above in the discussion of claim 27, Fukuda discloses all of the limitations of the parent claim. However, Fukuda fails to disclose the specific flash arrangement disclosed in claim 62. Matsui, on the other hand discloses that it is well known in the art to use a xenon emission tube (7) and one capacitor (5) for storing charge to emit light during a photographing operation. This structure is well known in the art and since Fukuda is silent on how the flash is constructed, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the flash construction of Matsui to implement the flash of Fukuda since it is a well known flash structure in the art.

31. As for *claim 66*, Fukuda disclose the use of one main capacitor (5).

32. **Claims 62 and 66 rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-312199 A) in view of Matsui et al. (U.S. Patent No. 5,640,622).**

33. The rejection of claims 62 and 66 using Japanese Fukuda reference (Japanese Publ. No. 09-312199 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claims 62 and 66 in the preceding paragraph.

34. **Claims 62 and 66 rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-326963 A) in view of Matsui et al. (U.S. Patent No. 5,640,622).**

35. The rejection of claims 62 and 66 using Japanese Fukuda reference (Japanese Publ. No. 09-326963 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claims 62 and 66 in the preceding paragraphs.

36. **Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (U.S. Patent No. 6,278,490) in view of Matsui et al. (U.S. Patent No. 5,640,622) and further in view of Watanabe et al. (U.S. Patent No. 4,467,248).**

37. Regarding *claim 70*, as mentioned above in the discussion of claim 62, both Fukuda and Matsui disclose all of the limitations of the parent claim. However, neither of the aforementioned references discloses the use of several storage capacitors connected in parallel. Watanabe, on the other hand, discloses that it is well known in the art to connect several capacitors in parallel in order to affect a flash. By connecting several capacitors in parallel the

user can customize the amount of illumination provided and thereby promote efficient conservation of the power source. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use several capacitors in parallel so the user can customize the amount of illumination and conserve the power source.

38. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-312199 A) in view of Matsui et al. (U.S. Patent No. 5,640,622) and further in view of Watanabe et al. (U.S. Patent No. 4,467,248).

39. The rejection of claim 70 using Japanese Fukuda reference (Japanese Publ. No. 09-312199 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 70 in the preceding paragraph.

40. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-326963 A) in view of Matsui et al. (U.S. Patent No. 5,640,622) and further in view of Watanabe et al. (U.S. Patent No. 4,467,248).

41. The rejection of claim 70 using Japanese Fukuda reference (Japanese Publ. No. 09-326963 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 70 in the preceding paragraphs.

42. Claims 63, 67, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (U.S. Patent No. 6,278,490) in view of Watanabe et al. (U.S. Patent No. 4,467,248).

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43. As for **claim 63**, as mentioned above in the discussion of claim 27, Fukuda discloses all of the limitations of the parent claim. However, Fukuda fails to disclose the specific arrangement for the flash as described in claim 63. Watanabe, on the other hand, teaches that it is well known in the art to provide one xenon emission tube (5) and plurality of charge storage means and switching means. By connecting several capacitors in parallel the user can customize the amount of illumination provided and thereby promote efficient conservation of the power source. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use several capacitors in parallel so the user can customize the amount of illumination and conserve the power source.

44. With regard to **claim 67**, Watanabe discloses that capacitor (6) is the main capacitor.

45. Regarding **claim 71**, Watanabe discloses a plurality of capacitors in parallel with one another.

46. Claims 63, 67, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-312199 A) in view of Watanabe et al. (U.S. Patent No. 4,467,248).

47. The rejection of claims 63, 67, and 71 using Japanese Fukuda reference (Japanese Publ. No. 09-312199 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claims 63, 67, and 71 in the preceding paragraphs.

48. Claims 63, 67, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-326963 A) in view of Watanabe et al. (U.S. Patent No. 4,467,248).

49. The rejection of claims 63, 67, and 71 using Japanese Fukuda reference (Japanese Publ. No. 09-326963 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 63, 67, and 71 in the preceding paragraphs.

50. Claims 65 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (U.S. Patent No. 6,278,490) in view of Lo et al. (U.S. Patent No. 5,835,794).

51. Regarding *claim 65*, as mentioned above in the discussion of claim 27, Fukuda discloses all of the limitations of the parent claim. However, Fukuda fails to disclose the specific flash arrangement mentioned in claim 65. Lo, on the other hand discloses that it is well known in the art to use several xenon emission tubes and several charge storage means for capturing a plurality of images. The system of Lo also includes a switching means for switching between various flash units. This arrangement allows a user to set up and arrange lights in any way they see fit. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the arrangement for the flash as in Lo so that the user is afforded more maneuverability when composing images.

52. As for *claim 69*, Lo discloses that each flash unit includes one main capacitor (C).

53. Claims 65 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-312199 A) in view of Lo et al. (U.S. Patent No. 5,835,794).

54. The rejection of claims 65 and 69 using Japanese Fukuda reference (Japanese Publ. No. 09-312199 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claims 65 and 69 in the preceding paragraphs.

55. Claims 65 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-326963 A) in view of Lo et al. (U.S. Patent No. 5,835,794).

56. The rejection of claims 65 and 69 using Japanese Fukuda reference (Japanese Publ. No. 09-326963 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 65 and 69 in the preceding paragraphs.

57. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (U.S. Patent No. 6,278,490) in view of Lo et al. (U.S. Patent No. 5,835,794) and further in view of Watanabe et al. (U.S. Patent No. 4,467,248).

58. Regarding *claim 73*, as mentioned above in the discussion of claim 62, both Fukuda and Lo disclose all of the limitations of the parent claim. However, neither of the aforementioned references discloses the use of several storage capacitors connected in parallel. Watanabe, on the other hand, discloses that it is well known in the art to connect several capacitors in parallel in order to affect a flash. By connecting several capacitors in parallel the user can customize the

amount of illumination provided and thereby promote efficient conservation of the power source. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to use several capacitors in parallel so the user can customize the amount of illumination and conserve the power source.

59. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-312199 A) in view of Lo et al. (U.S. Patent No. 5,835,794) and further in view of Watanabe et al. (U.S. Patent No. 4,467,248).

60. The rejection of claim 73 using Japanese Fukuda reference (Japanese Publ. No. 09-312199 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 73 in the preceding paragraphs.

61. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-326963 A) in view of Lo et al. (U.S. Patent No. 5,835,794) and further in view of Watanabe et al. (U.S. Patent No. 4,467,248).

62. The rejection of claim 73 using Japanese Fukuda reference (Japanese Publ. No. 09-326963 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 73 in the preceding paragraphs.

63. Claims 77 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (U.S. Patent No. 6,278,490) in view of Suh (U.S. Patent No. 5,946,035).

64. Regarding *claim 77*, as mentioned above in the discussion of claim 27 above, Fukuda discloses all of the limitations of the parent claim. However, Fukuda fails to disclose a range finding means or that the emission is controlled based upon the distance information. However, Suh discloses a camera of effecting two light emissions wherein the camera is capable of measuring a distance to an object. Inherently this operation would include a range finding means. Furthermore, Suh discloses that the optimum light emission is calculated based upon the distance information. See column 3, lines 16-30. This allows a system to automatically determine the amount of flash needed for a photographing operation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine the distance to an object and use that distance to determine an optimum flash emission so that it can be automatically done instead of being a set value or manually set by the user.

65. As for *claim 78*, Suh discloses that the first emission is based upon the distance information. Fukuda discloses that the first emission is the smaller emission.

66. Claims 77 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-312199 A) in view of Suh (U.S. Patent No. 5,946,035).

67. The rejection of claims 77 and 78 using Japanese Fukuda reference (Japanese Publ. No. 09-312199 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 77 and 78 in the preceding paragraphs.

68. Claims 77 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-326963 A) in view of Suh (U.S. Patent No. 5,946,035).

69. The rejection of claims 77 and 78 using Japanese Fukuda reference (Japanese Publ. No. 09-326963 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 77 and 78 in the preceding paragraphs.

70. Claims 79-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (U.S. Patent No. 6,278,490) in view of Sugimoto (U.S. Patent No. 6,195,127).

31. Regarding *claim 79*, as mentioned above in the discussion of claim 27, Fukuda discloses all of the limitations of the parent claim. However, Fukuda fails to disclose the use of a pre-photometry means and controlling the flash based on the pre-photometry means. Sugimoto, on the other hand, discloses that it is well known in the art to emit a pre-emission from the flash means and measure the data from the pre-emission to establish reference data for future photographs. The system calculates a luminance level based on the pre-emission and then calculates a major light emission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a pre-emission to calculate a major emission amount so that an accurate flash value is obtained.

32. As for *claim 81*, Sugimoto discloses external photometry means.

33. As for *claim 83*, Sugimoto discloses that the pre-photometry means is used in common with the image pickup means.

34. Regarding, *claim 80*, as mentioned above in the discussion of claim 27, Fukuda discloses all of the limitations of the parent claim. However, Fukuda fails to disclose the use of a pre-photometry means and controlling the flash based on the pre-photometry means using a pre-emission. Sugimoto, on the other hand, discloses that it is well known in the art to emit a pre-

emission from the flash means and measure the data from the pre-emission to establish reference data for future photographs. The system calculates a luminance level based on the pre-emission and then calculates a major light emission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a pre-emission to calculate a major emission amount so that an accurate flash value is obtained.

35. As for *claim 82*, Sugimoto discloses external photometry means.

36. With regard to *claim 84*, Sugimoto discloses that the pre-photometry means is used in common with the image pickup means.

71. Claims 79-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-312199 A) in view of Sugimoto (U.S. Patent No. 6,195,127).

72. The rejection of claims 79-84 using Japanese Fukuda reference (Japanese Publ. No. 09-312199 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 79-84 in the preceding paragraphs.

73. Claims 79-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (Japanese Publ. No. 09-326963 A) in view of Sugimoto (U.S. Patent No. 6,195,127).

74. The rejection of claims 79-84 using Japanese Fukuda reference (Japanese Publ. No. 09-326963 A) is the same as the rejection using the U.S. Patent to Fukuda. Please see the rejection of claim 79-84 in the preceding paragraphs.

Allowable Subject Matter

75. Claim 7 is allowed.

76. The following is an examiner's statement of reasons for allowance:

Regarding claim 7, the primary reason for allowance is that the prior art fails to teach or reasonably suggest timing for stopping the smaller emission set as the same as the timing for the stopping of an electronic shutter operation of the image pickup device.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

77. Claims 30-52, 64, 68, and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and steps to overcome the double patenting rejection are taken.

78. The following is a statement of reasons for the indication of allowable subject matter:

79. Regarding ***claim 30***, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the total of the emission amounts at the two images is set equal to or lower than the total emission energy of the single charge storage means.

80. As for ***claim 31***, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that a full emission of the flash storage means is

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caused at each of the shots by selectively using the plurality of charge storage means so as to made a difference in the total capacitance values to be used.

81. As for *claim 32*, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest a plurality of charge storage means wherein the first charge storage means emits a smaller emission and the second charge storage means emits a larger emission under dimming control.

82. As for *claim 33*, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest a plurality of charge storage means wherein the first charge storage means emits a smaller emission under dimming control and the second charge storage means emits a larger emission.

83. Regarding *claim 34*, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest at least one charge storage means wherein the first charge storage means emits a smaller emission and the second charge storage means emits a larger emission both performed under dimming control.

As for *claim 64*, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest a plurality of xenon emission tubes using one charge storage means and is caused to emit a two shots of picture taking by using at least one xenon emission tube switched and selected by a xenon emission tube switching means and the one charge storage means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. VILLECCO whose telephone number is (571)272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN M. VILLECCO/
Primary Examiner, Art Unit 2622
May